AMENDMENTS TO THE CLAIMS

Y .

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

(Currently Amended) A method of forming a structural panel, comprising:
using at least one metal sheet to form a frame structure, wherein the metal
sheet defines an opening;

applying a generally <u>optically</u> transparent, fiber pre-impregnated resin tape to the metal sheet to <u>at least partially</u> <u>substantially</u> cover the metal sheet and fill the opening;

heating the metal sheet and the fiber pre-impregnated resin tape such that the resin melts and at least partially substantially covers the metal sheet and fills the opening; and

wherein once cured, the generally transparent, fiber pre-impregnated resin tape forms a see-through window portion in the frame panel.

2. (Currently Amended) The method of claim 1, wherein applying the generally optically transparent, fiber pre-impregnated resin tape to the metal sheet comprises applying a plurality of fiber pre-impregnated resin tapes one adjacent another to fully cover the metal sheet and fully fill the opening therein.

3. (Original) The method of claim 1, wherein the fiber pre-impregnated resin tape comprises a plurality of fibers impressed into a resin tape.

, , ,

- 4. (Original) The method of claim 3, wherein the fibers are comprised of fiberglass.
- 5. (Currently Amended) The method of claim 3, wherein the resin comprises [[an]] a transparent aliphatic epoxy resin.
- 6. (Original) The method of claim 3, wherein the fibers have an index of refraction matching an index of refraction of the resin.
- 7. (Original) The method of claim 1, wherein the metal sheet comprises a plurality of metal foil strips.
 - 8. (Cancelled)
- 9. (Original) The method of claim 1, wherein the metal sheet is comprised of aluminum.
- 10. (Original) The method of claim 1, wherein the metal sheet is comprised of titanium.

11. (Original) The method of claim 1, wherein the metal sheet forms a plurality of openings each corresponding to a window.

5 E

- 12. (Original) The method of claim 1, wherein the fiber pre-impregnated resin tape has a width of approximately 1/8" (3.175 mm) to about 12" (304.8 mm).
- 13. (Currently Amended) A method of manufacturing a transparent window skin panel comprising:

providing a tool;

providing a pre-impregnated resin tape comprised of a plurality of fibers impressed into a resin;

providing a structural metal sheet having a plurality of perforations spaced apart openings formed therein;

layering the pre-impregnated resin tape and the structural sheet onto the tool such that the structural sheet and the pre-impregnated resin tape are aligned one atop the other, such that the pre-impregnated resin tape completely covers the openings and overlays a periphery of the metal sheet;

heating the tool, the structural sheet, and the pre-impregnated resin tape such that the resin flows to <u>at least</u> partially cover the metal sheet and the fibers, the resin and fibers being substantially transparent to form a <u>plurality of</u> see-through window <u>portion portions</u> in the skin panel.

14. (Cancelled)

15. (Currently Amended) The method of manufacturing a transparent window skin panel of claim 13, wherein providing a pre-impregnated resin tape, providing a metal sheet, and layering the pre-impregnated resin tape and the metal sheet onto the tool are repeated to produce a series comprises using a plurality of metal sheets and a plurality of layers of variously alternating pre-impregnated resin tapes, and arranging the metal sheets and layers of pre-impregnated resin tapes in alternating layers.

16. (Cancelled)

- 17. (Currently Amended) The method of manufacturing a transparent window skin panel of claim 16, wherein applying the pre-impregnated resin tape within any given layer comprises applying a plurality of fiber pre-impregnated resin tapes one adjacent another to fully cover the metal sheets and fully fill the openings therein in the metal sheets.
- 18. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the fibers have an index of refraction matching an index of refraction of the resin.
- 19. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the resin comprises a transparent aliphatic epoxy.

- 20. (Currently Amended) The method of manufacturing a transparent window skin panel of claim 13, wherein the metal sheets are sheet is comprised of aluminum.
- 21. (Currently Amended) The method of manufacturing a transparent window skin panel of claim 13, wherein the metal sheets are sheet is comprised of titanium.
- 22. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the fibers are comprised of fiberglass.
- 23. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the resin comprises a transparent aliphatic epoxy resin.
- 24. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the fibers have an index of refraction matching an index of refraction of the resin.
- 25. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the metal sheet comprises a plurality of metal foil strips.
 - 26. (Cancelled)
- 27. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the metal sheet is comprised of aluminum.

- 28. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the metal sheet is comprised of titanium.
- 29. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein the pre-impregnated resin tape has a width of approximately 1/8" (3.175 mm) to about 12" (304.8 mm).
- 30. (Original) The method of manufacturing a transparent window skin panel of claim 13, further comprising placing a caul plate atop the metal sheet, pre-impregnated resin tape, and tool.
- 31. (Original) The method of manufacturing a transparent window skin panel of claim 30, further comprising placing the caul plate, metal sheet, pre-impregnated resin tape, and tool into a vacuum bag and removing the air therein.
- 32. (Original) The method of manufacturing a transparent window skin panel of claim 13, wherein heating the tool, metal sheet, and pre-impregnated resin tape comprises using an autoclave.
- 33. (Original) The method of manufacturing a transparent window skin panel of claim 29, wherein the autoclave heats the tool, metal sheet, and pre-impregnated resin tape to approximately 350 degrees Fahrenheit under approximately 100 to 200 psi of pressure.